APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,014	09/27/2001	Wayne Elmo Vicknair	AUS920010548US1	2757

35525 7590 07/18/2007
IBM CORP (YA)
C/O YEE & ASSOCIATES PC
P.O. BOX 802333
DALLAS, TX 75380

EXAMINER
AILES, BENJAMIN A

ART UNIT	PAPER NUMBER
2142	

MAIL DATE	DELIVERY MODE
07/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *19 April 2007*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,2,4-10,12-18 and 20-29* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,2,4-10,12-18 and 20-29* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to correspondence filed 19 April 2007.

2.   Claims 1-2, 4-10, 12-18 and 20-29 remain pending.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   This application currently names joint inventors. In considering patentability of

the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

5.   Claims 1-2, 4-6, 9, 10, 12-14, 17, 18, 20-22 are rejected under 35 U.S.C. 103(a)

as being unpatentable over Brook (US 2002/0038320), in view of Call (US

2002/0143521).

6.   Regarding claim 1, Brook teaches a method for "retrieving a data value from a

character stream" by processing a text stream and obtaining information for each

character in the data (text) stream (p. 9, para. 227, lines 1-5 and 231, lines 1-4). Brook

teaches on performing a validity test on each character in the stream but does not

clearly recite the explicit use of a data structure to store the characters by location (i.e.

an array). However, in related art, Call teaches on this aspect. Call teaches the use of

a data structure, an array, to store and index using integer values of character data (p.

2, para. 0016). One of ordinary skill in the art at the time of the applicant's invention

would have found it obvious to utilize a data structure like an array to index character

values as demonstrated by Call in combination with the character validation method

taught and suggested by Brook. One of ordinary skill in the art would have been

motivated to utilize a data structure like an array to promote easy organization and

efficient execution of processing functions by way of easy indexing of character values

(see Call, p. 2, para. 0016). Brook teaches the use of the computer language XML (p.

9, para. 227).

7.   Regarding claim 2, the same rationale as utilized in the rejection of claim 1

applies equally as well to claim 2, wherein Brook teaches on performing a validity test

on each character in the stream but does not clearly recite the explicit use of a data

structure to store the characters. However, in related art, Call teaches on this aspect.

Call teaches the use of a data structure, an array, to store and index using integer

values of character data (p. 2, para. 0016). One of ordinary skill in the art at the time

of the applicant's invention would have found it obvious to utilize a data structure like an

array to index character values as demonstrated by Call in combination with the

character validation method taught and suggested by Brook. One of ordinary skill in the

art would have been motivated to utilize a data structure like an array to promote easy

organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016).

8.   Regarding claim 4, Brook and Call teach on the aspect of wherein if the logical corresponds to a logically "TRUE" value, said data value represents a valid character (Brook, p. 10, para. 237, comparison against schema).

9.   Regarding claim 5, Brook and Call teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

10.   Regarding claim 6, Brook and Call teach on this aspect in view of the above rejection of claims 1 and 2 wherein Call teaches the use of the data structure being an array (see Call, p. 2, para. 0016).

11.   Claims 9, 10 and 12-14 contain similar subject matter and are rejected under the same rationale as claims 1, 2 and 4-6, respectively.

12.   Claims 17, 18 and 20-22 contain similar subject matter and are rejected under the same rationale as claims 1, 2 and 4-6, respectively.

13.   Claims 7-8, 15-16 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brook and Call in view of Zhao et al. (US 2002/0042707 A1), hereinafter referred to as Zhao.

14.   Regarding claims 7 and 8, Brook teaches the use of a wide range of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However Zhao teaches the analysis and format determination of extensible

markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's

invention, it would have been obvious to one of ordinary skill in the art to modify Brook's

method to allow it to process XML documents as input, as taught by Zhao. It logically

follows that the rules employed by Brook's character validation would be in accordance

with extensible markup language (XML) also. The motivation for doing so would have

been to be able to determine whether extensible markup language (XML) packets

match the extensible markup language (XML) protocol definition at an increased speed

over prior methods. Therefore it would have been obvious to combine Brook, Call and

Zhao for the benefit of increased processing speed to obtain the invention as specified

in claims 7-8.

15.   Claims 15 and 16 contain similar subject matter and are rejected under the same

rationale as claims 7 and 8.

16.   Claims 23 and 24 contain similar subject matter and are rejected under the same

rationale as claims 7 and 8.

17.   Regarding claim 25, Brooks teaches a character validation method comprising

the steps of: retrieving a data value from a character stream (p. 9, para. 227, lines 1-5

and 231, lines 1-4). Brook teaches on performing a validity test on each character in

the stream but does not clearly recite the explicit use of a data structure to store the

characters by location (i.e. an array). However, in related art, Call teaches on this

aspect. Call teaches the use of a data structure, an array, to store and index using

integer values of character data (p. 2, para. 0016). One of ordinary skill in the art at

the time of the applicant's invention would have found it obvious to utilize a data

structure like an array to index character values as demonstrated by Call in combination with the character validation method taught and suggested by Brook. One of ordinary skill in the art would have been motivated to utilize a data structure like an array to promote easy organization and efficient execution of processing functions by way of easy indexing of character values (see Call, p. 2, para. 0016). Brook teaches the use of a wide range of fonts and styles but does not explicitly disclose the use of extensible markup language (XML) syntax. However Zhao teaches the analysis and format determination of extensible markup language (XML) (see fig. 6, grammar packaging). At the time of the applicant's invention, it would have been obvious to one of ordinary skill in the art to modify Brook's method to allow it to process XML documents as input, as taught by Zhao. It logically follows that the rules employed by Brook's character validation would be in accordance with extensible markup language (XML) also. The motivation for doing so would have been to be able to determine whether extensible markup language (XML) packets match the extensible markup language (XML) protocol definition at an increased speed over prior methods. Therefore it would have been obvious to combine Brook, Call and Zhao for the benefit of increased processing speed to obtain the invention as specified. Brook, Call and Zhao teach on the aspect of further comprising if each character in said character stream is valid, applying a predetermined set of syntactic rules to byte patterns comprising said character stream (Brook, para. 237, ll. 6-15).

18.   Claims 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over
Brook, Call and Zhao in view of Jurion et al. (US 6,631,501 B1), hereinafter referred to
as Jurion.

19.   Regarding claims 26-29, the combination of Brook, Call and Zhao as outlined in
the above rejections teaches upon the aspects of character stream parsing and
performing validity tests upon the parsed characters but does not clearly teach upon the
aspect wherein the parsed characters are tested to be "base" characters, "digit"
characters and "extender" characters. While Brook, Call and Zhao do teach upon the
usage of characters in general, nothing is explicitly recited to classify these characters
into general groups (i.e. base, digit and extender). However, in related art, Jurion
teaches the automatic and replacement of characters wherein characters are tested on
their validity within a group or string of characters to determine whether a character
within the string is appropriate, or valid. Jurion teaches that the characters analyzed
can be of a plurality of different types of characters which would implicitly include "base"
characters, "digit" characters, and "extender" characters as claimed by applicant and
therefore one of ordinary skill in the art at the time of the applicant's invention would
have found it obvious to test the validity of characters utilizing aspects taught by Jurion,
specifically the use of base, digit, and extender characters (col. 3, lines 8-18). One of
ordinary skill in the art would have been motivated to utilize the teachings of Jurion in
combination with the teachings of Brook, Call, and Zhao in order to check the
syntactical rules of character streams correctly and efficiently as provided by Jurion as a
necessary need in the art of simple character validation (see Jurion, col. 2, ll. 41-52).

Response to Arguments

20.   Applicant's arguments filed 19 April 2007 have been fully considered but they are

not persuasive.

Claims 1-2, 4-6, 9, 10, 12-14, 17, 18 and 20-22

21.   Applicant argues with respect to exemplary claim 1 that none of the cited

references teaches or suggests "wherein said validity is determined according to a

logical combination of a plurality of status values in said member of said data structure"

and specifically that the cited references to not teach how the validity is determined.

Examiner respectfully disagrees with the applicant. Taking broadest reasonable

interpretation of the claim language, it is best understood that a character's validity is

determined based on a logical combination made with at least one of a plurality of

status values. The combination of Brook and Call teach on this limitation's aspects

wherein Brook is relied upon for teaching validity testing in paragraph 0231 on page 9

wherein Brook teaches the parsing of a stream of characters, in this case a stream of

XML characters, and the characters are tested for well-formedness which is deemed

within the scope of the broadly claimed "validity" test. Call is relied upon for teaching on

the aspect of utilizing a data structure to store characters by location (i.e. an array) as

taught on page 2, paragraph 0016. As mentioned in the rejection, one of ordinary skill

in the art at the time of the applicant's invention would have found it obvious to utilize a

data structure like an array to index character values as demonstrated by Call in

combination with the character validation method taught and suggested by Brook.

Therefore, claim 1 is not deemed patentable over the prior art of record.

Claims 7-8, 15-16 and 23-29

22.   Applicant's arguments with respect to claims 25 and 26 wherein the applicant

argues that the examiner has failed to properly establish a prima facie showing of

obviousness with respect to claims 25 and 26 has been considered but is moot in view

of the new ground(s) of rejection.

Conclusion

23.   The prior art made of record and not relied upon is considered pertinent to
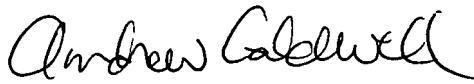
applicant's disclosure.

Howard et al. (US 7,197,769 B2) teaches methods and systems for screening input

strings intended for use by web servers.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-

3899. The examiner can normally be reached on M-F 6:30-4, IFP Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Caldwell can be reached on (571)272-3868. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

baa

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER